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# **OBSERVATIONS**

ON

# SULPHUROUS FUMIGATIONS,

AS A POWERFUL REMEDY IN

## DISEASES OF THE SKIN,

AND IN

RHEUMATIC, GOUTY, AND OTHER INVETERATE DISEASES:

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"L'impulsion est donnée; les gouvernemens, encouragés par les médecins, ne peuvent pas rester indifférens à une invention aussi salutaire, en faveur de laquelle l'intérêt plaide autant que l'humanité."

Observations sur les Fumigations Sulfureuses. Par J. De Carro, Vienne, 1819.

#### DUBLIN:

HODGES AND M'ARTHUR, COLLEGE-GREEN;
LONGMAN, HURST, REES, ORME, BROWN & GREEN,
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### ADVERTISEMENT.

The following pages are extracted from an Essay, written by me; and circulated in 1820 among the Medical Attendants of Hospitals, by order of the Irish Government. That Essay was published with the view of promoting the establishment, in Charitable Institutions, of apparatuses for the application of Sulphurous Vapour. That object has been in a great measure attained; and I have the sincere happiness of reflecting that numerous testimonials from medical practitioners of the first respectability, not only in different parts of Great Britain, but also in America, authorize me to conclude, that I have thereby contributed something to alleviate the miseries of my fellow-creatures. Nor can it be uninteresting to the benevolent to hear, that these communications, as well as my additional experience, during the six years which have elapsed since the publication of that Essay, confirm more and more the efficacy of the practice, when employed in appropriate cases, and by means of a pro-My present object is to make the public more geper apparatus. nerally acquainted with the importance of the admirable arrangements which have been lately completed at the Dublin Skin Infirmary, Moore-street, for the accommodation of such patients as may be able to contribute to the support of this interesting and valuable Institution: a plan which has been adopted at the Manchester and some other Infirmaries in England, where apparatuses similar to those used in the Dublin Skin Infirmary, have been erected. It is scarcely necessary to say that the part of the Institution, devoted to such patients, is entirely distinct, in every point of view, from that allotted to paupers.

WILLIAM WALLACE,

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## OBSERVATIONS

# ON SULPHUROUS FUMIGATIONS, &c.

It is well known how tardily, for the most part, improvements in any of the arts are propagated, and how long it is before even the most valuable inventions come into general use and application. This, on all occasions, and under every circumstance, is much to be regretted; and when we reflect on the feelings and on the motives, which too often oppose and retard every deviation from the beaten track, our opinion of human nature is seldom elevated. above all other arts, any thing approaching even to apathy is highly culpable. Those who are the public guardians of health, that greatest of blessings, should most zealously and fervently watch every opportunity, that may present the most distant prospect of extending the boundaries of their science, or of multiplying their capabilities of being useful. Unfortunately, however, they are not always free from that censure, which is generally applicable to the professors of every art; and the history of medicine affords numerous instances, not only of the apathy with which they receive, and the tardiness with which they apply some of the most useful inventions, but also of the determined resistance with which they oppose the application of discoveries, that have been afterwards sufficient to immortalize their authors.

At the same time it must be conceded, that occasionally, for want of sufficient zeal to examine into the foundation of opinions and practices, when first promulgated, the errors of enthusiasts, or the assertions of dissemblers, are sometimes permitted to be propagated, and to have a long and powerful influence in retarding our inquiries after truth.

Although we happily live at a period, when prejudices against innovations are far from being so strong, as in those instances of hostility to improvements, which history affords; and when an innovator has scarcely reason to fear any consequences from the promulgation of his opinions, resembling the persecutions of old; it must be admitted, that, even at present, the progress of the arts and sciences is often retarded by the indifference or unwillingness, with which new discoveries are frequently received; more particularly, when they are much in opposition to accustomed modes of thinking and acting, and when trouble and exertion are required for their application.

There is therefore, unfortunately, no room for surprise, that a remedy of the first importance, and one of the most valuable modern improvements in therapeuticks, should be long in obtaining that attention, examination, and application, which it most highly deserves.

It is many years since my attention was forcibly roused by observing the extreme frequency of diseases of the skin, the great distress they occasion, the inefficacy of the remedies in general use for their relief, the little attention paid to the improvement of this branch of pathology, and the want of opportunities experienced by the medical student of acquiring almost any information respecting these affections. More recently, while I remarked with pleasure, that an impulse had been given to scientific inquiries into this most important, though neglected branch of our profession, on the Continent by Alibert, and in England, by Willan, I could not but lament most sincerely, that in this metropolis, where, above all other cities, these diseases are extremely prevalent, we remained comparatively insensible to investigations, carried on elsewhere with much zeal. It was with these feelings, that, in the year 1818, determined to use my exertions, however feeble, in calling attention to a matter, which I may

convinced would soon plead its own importance, I published a prospectus or plan for the establishment of an hospital; which might at once afford relief to the poor; supply the means of extending our knowledge of cutaneous diseases, by accurate clinical investigation and extensive observation; and establish a school for the instruction of medical students. On the first of October of the same year, I had the gratification of seeing my plan carried into execution, and have already the satisfaction of its having afforded relief to thousands of my fellow creatures.\* Anxious to concentrate in our infant institution, and to put to the test of experience, every means which promised relief in these most obstinate affections, I took every opportunity of ascertaining the state of practice in cutaneous diseases, from every quarter in which I could hope to gain information. It was in consequence of such inquiries, that I fortunately became acquainted with that remedy and the instrument for its application, to which it is the object of these observations to call the serious attention of the public, and of the profession in general, but particularly of such as are entrusted with the care of hospitals. As the most certain mode of accomplishing this object, I shall proceed to communicate a succinct history of the origin of the practice; of its progress on the Continent; of the investigations to which it has been submitted; and of the results of these investigations; and content myself, for the present, with adding in conclusion, some general observations and reflections, derived from my own experience in its application, as well in hospital as in private practice.+

Although we find artificial sulphurous fumigations mentioned, since the earliest ages of medicine, ‡ as a remedy for diseases of the skin, and even in some authors apparatuses described for their application, § they had fallen almost entirely into disuse, until 1812; when the researches of Dr. Galés, a physician in Paris, happily led, not only to their application for the relief of cutaneous and rheumatic diseases, and of some other chronic affectious, which had hitherto resisted all known means of relief, but also to the invention of an instrument, admirably contrived for their administration. Dr. Galés, from an official connexion, ever since 1792, with all the hospitals in Paris, had enjoyed considerable opportunities of observing the various and complicated diseases of the skin; and, for the last thirteen years, these opportunities became much increased by his particular appointment to the Hôpital St. Louis: an institution almost solely devoted to the relief of these affections. In the year 1812, this physician commenced a series of inquiries on that highly contagious disease, scabies: a disease, respecting which his extensive experience informed him, that, although

\* Since this period similar institutions have been established in London and

‡ See Celsus, lib. 3. xxvii. 2.—lib. 4. xx. 1. Hippocrates, de Morbis Muliebribus; the "Dictionaire Encyclopedique" of 1753, article "Fumigation."—
J. P. Franck "De Curandis Hominum Morbis, Lib. iv. de Impetiginibus."
"Gazette de Salsburg" of 1792.—See also a work, published by Glauber in
1659, entitled "Furni Novi Philosophici."

§ See Glauber's Work, and "Nouvelle Méthode de traiter les Maladies Vé-

<sup>†</sup> For facts connected with the history of the practice of fumigation see "Mémoire et Rapports sur les Fumigations Sulfureuses, appliquées au Traitement des Affections Cutanées, et de plusieurs autres Maladies, par J. C. Galés, imprimés par ordre du Gouvernement. Paris, 1816."—" Essai sur la Gale, brochure in—4to. avec Figures, à Paris, par J. C. Galés."—" Description des Appareils a Fumigations, établis, sur les Dessins de M. D'Arcet, à l'Hôpital Saint Louis, en 1814, et successivement dans plusieurs Hôpitaux de Paris, pour le Traitement des Maladies de la Peau, à Paris, 1818."—" Observations Pratiques sur les Fumigations Sulfarenses par Jean de Carro. Vienne, 1819."—
"Essai sur L'Atmidiatrique ou Médicine par les Vapeurs, par T. Rapou, de Lyon, D. M. P."—and also "Dictionaire des Sciences Medicales," Articles "Gale et Fumigation."

extremely common, many facts of the first importance, relating more particularly to its etiology and diagnosis, were involved in the greatest obscurity. The first object of Dr. Galés was to investigate the immediate cause of scabies, and to determine whether it was owing, as naturalists conceived, to the presence of an insect, the Acarus Scabiei, or to a morbific poison, the product of animal secretion. This last being the more general opinion of pathologists; who, although admitting the existence of the insect in the vesicles or pustules of scabies, considered it rather the consequence than the cause of the disease.\*

Dr. Galés, during his researches, confirmed the opinion of naturalists, not only by uniformly finding this insect in the vesicle of scabies, when examined with proper precautions, and at a proper period, but also by his being able to propagate the disease, ad infinitum, by the application of the Acarus to the scarf-skin of a healthy person; and by the simple contact of the individual, so infected, with others in a state of health. † The experiments illustrative of these facts were made before Duchanoy, Administrator of Hospitals, (chargé spécialement du service de santé,) Laporte and Ruffin, first physician and surgeon of the Hôpital St. Louis; Leroux, Dean of the Faculty of Medicine of Paris; Villers, Dean of that of Strasbourg; Professors Pelletan, Thillaye, Petit-Radel, Dumeril, Dupuytren; M. M. Bosc, Olivier, Treille, Patrix; and, finally, before the illustrious Professor Pinel, though old, still affording an example of indefatigable zeal in inquiries after truth.

Galés having thus, in the most satisfactory manner, ascertained the cause of this disease, and consequently the true principles of treatment, directed his attention to discover a remedy, which would be prompt in its operation, safe in its application, certain in its effects, and capable of being used with as little inconvenience as possible. Sulphurous frictions had been long known, as an almost certain specific in this disease; but its administration presented numerous inconveniences. The length of time required for this mode of treatment; the dirt which accompanied it, and often produced cutaneous affections, and which, in hospitals occasioned great expense in the article of linen; and, finally, its occasional inefficacy; had induced physicians to seek other medicines, more convenient than this mineral, or a more advantageous mode of applying it. Hence that multitude of external remedies, which have, from time to time, been proposed and rejected. † It was evident to Dr. Galés, that the principle, upon which any remedy could cure this disease, must be by destroying the Acarus, its immediate cause. This enquirer, already acquainted with the antipsorick efficacy of sulphur; reflecting, moreover, that workmen, such as chimney-sweepers, miners, fire-workers, night-men, and persons employed in wards of hospitals, where there are a great number of patients treated by sulphurous frictions, never

+ This explains why Pathologists have sometimes failed in their experiments to produce the disease by inoculation with the contents of the vesicles or pustules of scabies, in a state of maturity, as, at this period, they do not always

contain, according to Galés, the insect in a living state.

<sup>\*</sup> There were however several Physicians of opinion, that the disease, although not always owing to the insect, frequently depended upon it.—viz. Bonani, Borelli, Cestoni, Deidier, Etmuller, Guldner, Langius, Mead, Morgagni, Osiander, Pringle, Pallas, Richard, Redi, Rivinus, Vercelloni, Wichman, &c.

<sup>‡</sup> Some idea may be formed of the number of remedies that have been used for the cure of scabies, from the circumstance, that there are on record experiments proving the utility of the following vegetable remedies in this disease, administered in the form of decoction, infusion, or powder mixed with axunge, viz.—Nicotiana tabacum, Ranunculus, Delphinium staphisagria, Anemone, Euphorbia, Scabiosa, Sedum acre, Sinapis nigra, Schinusmolle, Cucumis colocynthis, Capsicum annuum, Anthemis pyrethrum, Acorus calamus, Juglans regia, Cornus mas, Laurus nobilis, Nerium oleander, Polygonum hydropyper, Juniperus sabina, Ruta graveo-

contracted scabies, because their bodies are continually plunged in an atmosphere charged with sulphurous particles; and, finally, that the vapour of sulphur is one of the most certain means of destroying bugs, and other insects, produced by inattention to cleanliness; was induced to try on the insect of scabies the influence of sulphur, reduced to the state of an acid gass, or of extreme division. His experiments were perfectly satisfactory. He collected the insect on plates of glass; and exposing it to the vapour of this mineral in combustion, it perished almost instantly.

This physician, thus induced to conceive that the vapour of sulphur, applied to the surface of the body, would be a certain means of curing scabies, exercised his invention to discover some method of surrounding the body of patients, labouring under this disease, with an atmosphere of sulphurous vapour, and at the same time of protecting from its influence the organs of respiration. The apparatus, which he first used for this purpose, was very rude in its construction, and extremely inconvenient in its application. It merely consisted of a heated pan, on which the flowers of sulphur, mixed with nitrate of potash, were thrown, and the whole introduced under the bed-clothes of the patient, tucked as close as possible about his body. Notwithstanding the imperfection of this mode, the most decidedly beneficial effects were observed, even from the first fumigation. Patients, who had not, for a length of time, enjoyed a comfortable sleep, in consequence of the intolerable itching with which they had been harassed, got tranquil rest; the pustules or vesicles peculiar to the disease shrunk and faded; no new ones appeared; all itching subsided; and, after the seventh fumigation, the greater number of patients were regarded as cured. It was in the month of August, 1812, that Dr. Galés commenced this mode of treating scabies; and, from this period to the first of March, 1813, he fumigated, at the Hôpital Saint-Louis, 335 patients. Of these experiments, an exact tabular registry has been preserved. This registry was kept by Dr. Manry and M. Troccon, resident pupils of the hospital; and its authenticity certified by Laporte and Ruffin. From this document it appears, that all these patients obtained a rapid cure; and, what was of great importance, it is also proved by the certificate of M. Bailly, (Agent de surveillance de l'Hôpital St.-Louis) that only one, out of the entire number, returned to the hospital, labouring under the same disease; and it could not be ascertained, whether this case was owing to a fresh contagion, or to a relapse of the former.

It therefore appears, that the success of sulphurous fumigations, administered, even in this imperfect manner, was very great; but the inconveniences that attended their application were considerable. Negligence in the administration often retarded the cure; the sulphurous vapour, when sufficiently concentrated, injured the bed-clothes; and, frequently escaping, affected the organs of respiration, not only of the patient fumigated, but of every one who inhabited the same ward. With the view of obviating these inconveniences, Dr. Galés constructed a fumigating apparatus, resembling, in many respects, that described by the Chevalier Lallouette;\* which, afterwards improved and altered, partly by himself, and partly by D'Arcet, the ingenious mechanist and able chemist, afforded him the means of prosecuting his experiments in the most satisfactory manner. †

<sup>\*</sup> See "Nouvelle Méthode de traiter les Maladies Véneriennes, par Pierre Lallouette."

<sup>†</sup> It is for the invention of this apparatus, that the profession are more particularly indebted to these zealous enquirers; for, as I have already remarked, the have been much practiced balther the profession are more particularly indebted to these zealous enquirers; for, as I have already remarked, the have been much practiced balther to be a long known, and probably would

Among the great number of patients, who, labouring under scabies, were submitted to sulphurous fumigations, there were some in whom the disease was complicated with prurigo or violent itchings, tinea or scald-head, "dartres" or scorbutic eruptions, and rheumatism. Galés having observed, with great assiduity, the progress of treatment in every case; and having noted with exactness the most trifling circumstances, remarked the favourable impression, which these fumigations produced on affections of a much more grievous nature than the disease, for which they were administered; and was occasionally surprised to find, at the termination of the treatment for scabies, many of the patients radically cured, others manifestly in progress towards cure, and, in almost all the others, an evident amendment. Hence he was induced to make repeated trials of sulphurous fumigations in similar diseases uncombined with scabies, which were generally attended with the greatest success; and thus, led by accident or chance, to the extensive application of a remedy, which he had at first used upon scientific principles, he has been enabled to confer the greatest benefit on mankind.

The happy results, which were now obtained from the practice of fumigation, soon attracted, in a particular manner, the attention of the Governors of the Hôpital St. Louis. M. Duchanoy, after having observed, with great assiduity, for many months, the practice of Galés, became so convinced of the advantages of this method of cure, that, on the 21st of October, 1813, he ordered accurate experiments to be made, to ascertain the comparative effect of this process, with other means in use, for the treatment of scabies. By these experiments it was ascertained, that sulphurous fumigations enjoyed the greatest supe-An account of these experiments was daily submitted to the inspection of M. Morgue, that member of the general administration of the civil hospitals of Paris, particularly charged with the inspection of the Hôpital St. Louis. This vigilant administrator was so astonished at the results, and so convinced of the importance of the method, that he proposed, on the 17th of March, 1814, to his colleagues, the members of the administration of the civil hospitals, that a special medical jury should be appointed to examine, by a series of new experiments, the influence of sulphurous fumigations in the treatment of cutaneous diseases. His proposal was adopted: and the Chevalier Pinel, Member of the Institute, chief physician of the Hôpital Salpêtrière, and Professor to the Faculty of Medicine; Baron Dubois, Professor to the same Faculty; Esparon, first

by means of the common apparatuses, sulphurous fumigations, without their affecting the organs of respiration. Musa Brasavole, who flourished about the year 1534, speaks of the fatal effects, which have arisen from the employment of an imperfect apparatus, and says, "Nam quempiam vidi qui, ex fumo caput petente, in apoplexiam incidit, et statim mortuus in terram corruit." Dr. de Carro also observes, "Although the utility of sulphur, taken internally, administered in the form of frictions, and mixed with natural or artificial baths, in many chronic diseases of the skin, of the articulations, of the glands, of the lymphatic system in general, and in some gouty affections, was known from time immemorial, the most illustrious physicians have been anxious to invent a means of administering the vapour of this mineral, rendered acid, and more penetrating, by combustion: this wish was particularly published about thirty years ago, by a great physician of this capital, J. P. Franck. At different times many apparatuses have been invented, more or less perfect, for the administration of sulphurous fnmigations; but we had not been able to apply them without affecting the organs of respiration, until Dr. Galés invented and perfected his fumigating box: the success of which, since the year 1813, would appear incredible, if it was not certified by all the Civil and Medical Authorities of Paris."—De Carro, loc. cit. p. 4.

\* Alibert includes under the term "dartres" or scorbutic eruptions, the scaly

\* Alibert includes under the term "dartres" or scorbutic eruptions, the scaly lepra, the branny pityriasis, the scaly psoriasis, the tubercular lupus, the vesicular herpes, the erythematous rashes, the scabby ecthyma, and the vesicular pompholyx of Dr. Willan; which, although very dissimilar in their appearances

physician of the third Dispensary; Tartra, first surgeon of the first Dispensary; and Bouillon-la-Grange, Doctor in Medicine and Professor in Chemistry; were constituted members of the jury.

The jury commenced their observations at the Hôpital St. Louis, on the first of April, 1814; and, having employed two months in observing and noting, with great care, and from day to day, the effects of these fumigations on fiftyeight patients submitted to experiment, made a report to the general council of administration, of which the following are the principal facts and conclusions.

#### FACTS.

The number of fumigations administered to each patient varied according to the inveteracy, the species, the complication of the disease, the constitution, the

temperament, the age, and the sex of the patient.

One patient was cured by five fumigations, another required six. Five have been cured by seven fumigations each, two by nine, four by ten, one by eleven, seven by thirteen, four by fourteen, four by fifteen, eight by sixteen, one by eighteen, three by twenty, one by twenty-two, one by twenty-four, one by twenty-six, one by twenty-eight, three by thirty; finally, a scorbutic patient, who was radically cured, required seventy.

Females and children, cæteris paribus, required a smaller number of fumigations

than adult males, and particularly than old men.

The entire number of patients cured, who laboured under scorbutic eruptions, required two hundred and eighty three fumigations; which, divided among the whole, gives the average to each individual of thirty fumigations.

The patients labouring under scabies received six hundred and five fumi-

gations: thirteen the average.

Two patients, labouring under prurigo or violent itching, received eighteen

fumigations: nine each.

Sulphurous fumigations had a peculiarly beneficial effect on old, inveterate, complicated, and obstinate scabies; curing it proportionably quicker, than recent cases.

A patient, labouring under tinea or scald-head, received four fumigations.

The number of fumigations administered to each patient does not give the number of days required for his cure; many of them having received three, and even four fumigations daily.

The nine scorbutic patients, who were cured, required one hundred and twenty days for treatment; which makes thirteen days the average number for each.

The forty-three patients labouring under scabies required three hundred and twelve days: on an average seven days to each.

Each patient, labouring under prurigo or violent itching, required twelve days

for his treatment.

The patients labouring under scabies, and other cutaneous affections, submitted by the jury to sulphurous fumigations, were, in general, subjects in whom the disease had advanced to the highest degree, and possessed the most obstinate characters.

All the forty-three patients labouring under scabies obtained a cure. Nine scorbutic patients were cured, and three were relieved; the patients affected by violent itching were in progress towards cure; and the two patients affected with scald-heads obtained a radical cure.

#### CONCLUSION.

1. That sulphurous fumigations cure perfectly every kind of scabies, even the most inveterate.

2. That the number of fumigations requisite to cure scabies varies from four to twenty; according to the age and sex of the patient, and to the intensity, the species, and the complication of the disease.

That females and children, cæteris paribus, require a smaller number of

fumigations than adult males, and particularly than old men.

That old inveterate cases of scabies are cured proportionably more quick than recent cases.

5. That the length of time, required for each fumigation, is ordinarily about half an hour.

6. That patients may take even four fumigations daily according to their

7. That the treatment of scabies by sulphurous fumigation does not require any auxiliary treatment, either internal or external; or any sort of particular

regimen.

8. That, compared with all other known modes of treatment, even with those that are regarded the most rational and the most efficacious, such as sulphur ointments, mercurial ointments, mercurial lotions, arsenical frictions, lotions of tobacco, baths of sulphuret of potash, &c. &c., the treatment by sulphurous vapour excels very much in simplicity, brevity, innocence, and efficacy.

9. That it is also much less expensive than any of the others.

10. That various other cutaneous diseases, such as pedicular or lousy affections, prurigo or violent itching, tinea or scald-head, dartres or scorbutic eruptions, even inveterate and regarded as incurable, are susceptible of yielding to sulphurous fumigations.

11. That, in general, other chronic eruptive diseases require a greater number of fumigations than scabies; but that this means should always be regarded at

least as an auxiliary, in the treatment of these diseases.

12. That it is of the greatest importance to make known the advantages of these fumigations, to propagate them, to establish them in hospitals, on board vessels, in camps, in barracks, in prisons, &c.

(Signed) Pinel; A. Dubois; A.E. Tartra; Esparon; and Bouillon-la-Grange.

Seen and approved.—Signed MOURGUE.

In consequence of this report of the jury, the General Council of Adminstration decreed,

1st.—That a copy of it should be forwarded to the Prefect of the Department of the Seine, with the request, that he would transmit it to the Minister of the Home Department, for the purpose of giving the greatest publicity to a method, ascertained to be most valuable, as well on account of its great efficacy as economy.

economy.

2dly.—That there should be established, at the Hôpital St. Louis, twelve fumigating apparatuses, for the treatment of extern patients, labouring under

diseases of the skin.

3d.—That the Vice President should communicate to Dr. Galés their high sense of the great service he had rendered mankind by his discovery.

The Prefect of the Department of the Seine, forwarded the report of the jury to the Minister for the Home Department, for his serious consideration; who immediately transmitted it, with the following letter, to the Faculty of Medicine of Paris.

PARIS, 17TH OF JULY, 1814.

The Minister of the Home Department, to the Members composing the Faculty of Medicine of Paris.

GENTLEMEN.—Dr. Galés has been led by his studies and researches, respecting the nature of scabies, to make use of sulphurous fumigation for its cure.

In consequence of the success which attended the first experiments on this mode of treatment, the Council of Administration of the Hospitals of Paris thought proper to appoint a special jury to examine and ascertain its effects.

This jury, composed of M. M. Pinel, Dubois, Esparon, Tartra, and Bouillon-la-grange, observed with the greatest care, for two months, experiments made with sulphurous fumigations, upon about sixty individuals attacked with scabies and other cutaneous diseases.

Almost all the individuals, submitted to these experiments, have been completely cured; and the jury has formed the most favourable conclusions respective the united to these experiments, have been completely cured; and the jury has formed the most favourable conclusions respective the united to these experiments, have been completely cured; and the jury has formed the most favourable conclusions respectively.

pecting the utility of this mode of treatment.

The General Council of Administration of Hospitals decided, in consequence of the report of the jury, to establish, at the Hôpital St. Louis, fumigating apparatuses for the treatment of extern patients, labouring under scabies and other diseases of the skin; and the Prefect of the Department of the Seine has requested me to recommend this physician to the notice of Government, and to order the publication of the report, and of a memoir describing his method of cure, for the purpose of making it known to the entire empire.

Notwithstanding the confidence, which must be reposed in results testified by such men as those who composed the jury, I am not willing, Gentlemen, to give to this practice, and the report of the success which accompanied it, the publici-

I herewith transmit to you, in consequence, the report of the jury, and the different certificates attesting its authenticity; and request, that you will present to me, with some details, your opinion upon the different advantages attributed to the mode of treatment adopted by Dr. Galés, and upon the claim which this Physician has to the favour of Government.

I shall be obliged if you accelerate, as much as possible, your enquiries on

this subject.

Receive, Gentlemen, the assurance of my distinguished sentiments.

Signed

MONTALIVET.

The Faculty of Medicine of Paris, already engaged in the examination of many other processes for the cure of scabies and other cutaneous diseases, and in making comparative experiments, for the purpose of determining those that merited the preference, immediately commenced their enquiries respecting sulphurous fumigation; and elected commissioners from among their members, (the Dean and Professors,) to accomplish this undertaking. Two reports have been the consequence. The first of these reports was signed by Percy, Leroux, Richerand, and Dupuytren; and the second by Hallé, Dubois, Pinel and Dupuytren. These two reports confirm entirely the conclusions of the medical jury; and, moreover, we ascertain by the last report,

1. That sulphurous fumigations, employed for the cure of chronic diseases of the skin, have been found, in a great many cases, much more efficacious than any means that have been hitherto in use: such as, vegetable decoctions, mercury, preparations of antimony, sulphur, artificial and natural sulphurous baths, &c.

2. That, by sulphurous fumigations, they have been able to cure hereditary cutaneous diseases: which, existing from the earliest age, appeared to have become, by their antiquity, so inherent in the economy of the patients, that there were no hopes of cure; diseases which, moreover, had been fruitlessly combated

by a great number of remedies.

3. That diseases of the skin supervening on venerial affections, of which they had not been able to obtain a cure by the use of sudorificks and of mercury administered in many forms, quickly recovered under the influence of a slight antisyphilitic treatment, when the patient had been previously submitted to sulphurous fumigations.

Finally, sulphurous fumigations appear to favour the resolution of certain atonic tumors of the lymphatic system, such as scrophulous swellings, by exciting the vessels of lymphatic glands, or of other parts in which they are seated.

In consequence of this report, the Minister for the Home Department addressed a letter to the Prefect of the Department of the Seine, in which he observes, that M. Galés appeared to him worthy of a recompence for having rendered such vast services to the hospitals and to mankind; and required the Administrators of hospitals to name him physician to the Hôpital St. Louis, and to grant him a pension of 6000 francs per annum.

Sulphurous fumigations, thus sanctioned after a strict ordeal, were now universally adopted in the French capital, and apparatuses, for the relief of the poor, were immediately established at the different hospitals; among others, at the Hôtel-Dieu, Maison d'Accouchement, Maison Royale de Santé, Hôpital de la Charité, Hôpital Saint-Antoine, and at the Military Hospital of Val-de-Grace, by order of the Minister of War. Time, instead of diminishing confidence in the utility of the practice, has caused the French Government to become more and more convinced of its extreme importance. Hence, in 1816, it considered itself called on to order Galés to publish a memoir describing his method, and to issue the following circular to the Prefects of the Departments, for the purpose of encouraging and promoting its adoption throughout the entire empire.

Paris, 17th May, 1816.

M. THE PREFECT.—J. C. Galés, Doctor in Medicine, and formerly Apothecary to the Hôpital St. Louis, at Paris, has been conducted by his researches

The happiest success has crowned the labours of Dr. Galés. A jury, composed of the most distinguished physiciaus, and a commission constituted by members of the Faculty of Medicine of Paris, have successively examined, with peculiar care, the effects of this method: and these Commissioners have declared, that, for the cure of scabies, it appears to them infinitely superior, in respect to efficacy, innocence, and economy, to all those previously known; and that it is equally efficacious in the treatment of many other chronic diseases of the skin, of the joints, &c. &c.

I have in consequence thought, M. the Prefect, that it was my duty to cause to be printed a memoir by Dr. Galés on his method of cure, as well as the reports and observations to which it has given origin; and I have the honour to

forward to you—copies of this collection.

It is much to be desired, that the method of Dr. Galés be adopted in great hospitals, and in other establishments, such as depots of mendicants and houses of detention, where it is necessary to treat scabies and other cutaneous and chronic affections; and there is every reason to believe, that there would result from it a very great saving of expenditure in the treatment of these diseases.

You will therefore please to distribute the copies which I send you, to the administrators and to the physicians of establishments of this kind, which are in your department; and order them to establish, in these houses, apparatuses

proper to administer sulphurous fumigations.

I therefore authorise you, M, the Prefect, to defray the expence, which shall result from the purchase of these apparatuses, either out of the funds of those establishments which shall procure them, or, if you desire it, out of the funds for the accidental expenses of your department.

I have the honour, M. the Prefect, of offering you the assurance of the most

distinguished consideration.

The under Secretary from the Home Department.

Signed, BECQUEY.

After the promulgation of this circular, and the publication of the memoir, the practice was received with universal acclamation; and, thus finally established in France, it soon spread in every direction over the Continent of Europe; and, wherever used with attention and judgment, the results have not been less honourable to the cause of medicine, or less consoling to humanity, than those derived from its application in the country, in which it originated.

To Dr. de Carro, the highly accomplished and illustrious physician of Vienna, long known as a great benefactor to mankind, by his zealous and successful exertions in extending the application of the preservative against small pox, and ever anxious to employ himself for the benefit of his species, the rapid extension of the use of sulphurous fumigations on the Continent is in a great measure owing. In his "Observations Pratiques sur les Fumigations Sulfureuses," a paniphlet published at Vienna in 1819, he gives the following account of the manner in which he was first led to the use of this remedy.

"Early in the year 1817, a fortunate occurrence procured to me the perusal of a memoir, written by Dr. Galés, on sulphurous fumigations applied to the treatment of cutaneous and many other diseases, and printed by order of the French Government. Since ever I began to read with the intention of adopting whatever appeared to me of great importance, I cannot recal to my memory any thing but the work of Dr. Jenner on cow pox, which made on me so lively an impression. It was the reading of this which inspired me, twenty years ago, with the project of introducing upon the Continent, the preservative against the small pox; and each page of the memoir of Dr. Galés, and the astonishing and authentic cures therein registered, irresistably forced me to introduce into Germany an invention, which conferred as much honor on France as vaccination did on England,"

Dr. De Carro, immediately after reading the memoir, entered on a correspon. dence with Galés; and, having obtained from him all necessary information, and models of an apparent a catablished a 66 funion town 22 in his arms devalling

lished a "Notice;" and afterwards by an "Avis," he regularly communicated the result of his practice, every two or three months, until the termination of the first year.

In his first Avis, he observes, "After having introduced and propagated vaccination in the Austrian Monarchy, by means of which, in the space of eighteen years, the small pox has almost entirely disappeared, I congratulate myself at being again able to offer to suffering humanity a new means of curing many severe and obstinate diseases."

The second Avis is dated the 15th of August. In it he remarks, "Although my experience is dated only from the 24th of July, and although the diseases with whose treatment I have commenced, have resisted all other remedies, the results are already very satisfactory. I shall communicate an account of them in due time. The apparatus, in the unanimous opinion of the physicians who have seen it employed, indicates sufficiently, that this manner of administering sulphur is the most active which nature or art has ever been able to employ; and that so powerful a sudorific must produce the happiest effects in chronic diseases of the skin, of the joints, of the lymphatic system, and in some gouty affections."

In the third Avis, he says, " After three months practice with my apparatus, I consider myself called on to satisfy the desire which the public express of knowing the first results. The effects of these fumigations, in the diseases mentioned in my Notice, of the 15th of July, and in the second Avis of the 15th of August, has surpassed my hopes. With respect to scorbutic diseases, I have cured, without any internal remedy, many the most obstinate, which had been for years the torment of those they afflicted. The dry and scaly scorbntic eruptions appear to me to be less obstinate than the humid. Two of the latter have resisted, the one thirty-eight, and the other twenty-eight fumigations. The proportion of rebellious cases (cas rebelles) is small in comparison to those cured, many of which have been accomplished in from twelve to twenty-five fumiga-A variety of other less severe eruptions have disappeared in less than ten sittings. I have only treated three cases of scabies: two men and one young girl. Eight, ten, and three fumigations have been sufficient to deliver them from this disgusting and contagious disease; and I can affirm, that there does not exist any more easy mode of curing scabies. However efficacious these fumigations may be in the different diseases of the skin, they are still more so in chronic rheumatism, in a variety of pains of the joints, in lumbago, in sciatica, and other diseases of this species, which are deeply seated. It is for the patients, and not for me, to communicate the comfort that they experience in the apparatus, and during that half hour of repose which I order after the fumigation. Notwithstanding the abundant perspirations that it produces, none have ever found themselves debilitated. With some precautions, very easy to be taken, the use of fumigation may be continued through the winter. The confidence of patients in this new mode of cure is such, that I am obliged daily to refuse it in cases to which it does not appear to me to be applicable."

The fourth Avis is dated the 24th of March. From this I extract the following observations.—" I have proved that the treatment by fumigation may be practiced at all seasons. I confirm every thing, which I have already said respecting the efficacy of fumigations in different gouty affections, in lumbago, sciatica, and other chronic diseases of this kind, in scabies, and in herpetic eruptions,—I repeat, that, in the diseases to which this mode of treatment is applicable, the proportion of cases where one fails is small in comparison to those in which one succeeds. Although this remedy is not infallible, I affirm, after

These happy results attract many patients, labouring under or more efficacious. desperate diseases, who, after having used all known remedies, wish to try the chance of relief. The patient, of whom I have spoken in my third Avis, as having taken, without effect, twenty-eight fumigations, was cured in a short time after having discontinued them, by means of some remedies, which would not have been sufficient, if he had not been prepared by fumigations. This mode of treatment requires sometimes much perseverence, and it often astonishes me by the promptitude of its effects. My experience does not as yet permit me to determine with precision the kind of inveterate venerial diseases of the eruptive or gouty form, in which we can employ the fumigations, alone or combined with other remedies. Be it as it may, I never administer them in recent affections; but some observations authorise me to say, that they are extremely useful in diseases caused by the abuse of mercury; and even that they prepare advantageously for the use of this remedy in certain cases, where it had been already employed without success, and where it would not have been sufficient, without this preparation, to have effected a cure. Ephelides, vulgarly called chaleurs de foie (freckles and other discolorations,) disappear with ease. Two patients, one aged thirty years, and the other aged thirty-two, who had the back and chest covered with them for five years, have been entirely cured; the first in ten sittings, and the second in five. The ephelides of the last were accompanied with pains in the integuments of the head, and with a sensation of pressing and pricking so insupportable, that the patient was unable to occupy himself with objects requiring his attentiou. These pains, which came on at the same time as the ephelides, have disappeared with them, and this individual is restored to his former occupation. I have treated persons of every age from five to seventy. A little girl of six years old, very delicate, and a boy five years old, both labouring under a disease of the skin, which had resisted all ordinary remedies, have been cured by sulphurous vapour, without being weakened by these fumigations; although the former took twenty-three, and the latter fourteen. One of my most remarkable cures is that of a man seventy years of age, whose arms, from the elbows to the wrists, and legs, from the knees to the ankle, covered, for a year and half, with the most frightful herpetic eruption that I have had as yet to treat, were entirely cured in sixteen days, by fourteen fumigations."

Dr. de Carro, having thus practically investigated the advantages of this remedy, became so convinced of its value and importance, and so anxious for its general introduction, that, although enjoying the first rank in his profession, he did not think it beneath him to undertake the labour of having models, and apparatuses, constructed under his own inspection; and always ready for distribution. Much to the honor of the profession, and no doubt most gratifying to Dr. de Carro, his advice and example were so generally adopted, that, in an amazingly short time, he forwarded forty-eight apparatuses, which, among other places, were established at Presburg, Breslau, Rome, Prague, Trieste, Cronstadt, Venice, Parma, Warsaw, Padua, Brunn, Lemberg, Odenburgh, Hermanstadt, Odessa, Temeswar, Guns, Caschaw, Sarvarn, &c. Hence, in his fifth and last Avis, he says, "The happy results of the employment of sulphurous fumigations are confirmed more and more by experience; and this method is propagated with a rapidity on the Continent, of which the history of useful inventions offers few examples."

In August, 1819, as I have already mentioned, Dr. de Carro published his "Observations Pratiques sur les Fumigations Sulfureuses." In this work he communicates a history of the first two hundred cases, simple and complicated, in the order in which they occurred, with the results of each case. These cases constitute an irrefragable body of evidence of the great utility of sulphurous

fumigations; and the extreme candour and high character of the author leave not a shadow of doubt on the mind of the reader. The experience of Dr. de Carro confirms, to the fullest extent, the conclusions of the French Medical Jury, and of the Faculty of Medicine of Paris, so far as relates to diseases of the skin. As in Paris much less attention was paid to the influence of the remedy in the cure of rheumatic, gouty, and obstinate venerial affections, than in Vienna, the results of Dr. de Carro's practice is particularly valuable respecting them. Of sixty-five persons, labouring under rheumatism, sciatica, gouty, and anomalous pains thirty-five were cured, twenty-two very much relieved, and eight received no benefit.

Of ten inveterate venerial affections, where mercury having been used, or rather abused, produced a state of great debility, five were cured, four much relieved, and only one remained without receiving any benefit.

Dr. de Carro, at the end of his publication, gives us communications, which he received from some of his correspondents, to whom he had forwarded apparatuses. From these communications, the following remarks are extracted.

"The fumigating apparatus, which you furnished to our hospital, having answered our expectations, I am eager to express to you the sincere obligation, that we owe to a physician distinguished in so many ways as the zealous promoter of good and useful things. I sincerely tegret, that, being so short a time in possession of this apparatus, (from the 3d of July to the 18th of August,) it is not in my power to communicate to you facts more numerous or more satisfactory. I hope, nevertheless, that a summary extract from our registry will be sufficient to confirm the happy results of the mode of treatment by fumigation, and will be in harmony with your own observations."

Of twenty-seven patients labouring under scabies, twenty four were cured in from ten to fifteen fumigations; and three required from four to six. All have been cured without internal medicine. Nine patients labouring under gouty pains have experienced the best effects from sulphurous fumigatious; six have been cured; two have obtained more or less relief; and one alone, in whom the disease was inveterate, did not receive benefit. A complete paralysis of the inferior extremities, the cause of which was gout, has been so much ameliorated by this treatment, that the patient can move both his legs, and hold himself upright with little support. None of these patients have taken internal medicines. Consequently of thirty-nine individuals labouring under scabies and gouty affections, thirty-six have been cured or much relieved: three alone have not received any benefit."\*

"About the end of 1817, a society of physicians established, at Brunn, a fumigatory, the results of whose practice confirm the efficacy of sulphurous vapours. Twenty-seven patients, suffering from obstinate rheumatism, and from different diseases of the lymphatic, glandular, and cutaneous systems, were cured. We have seen miserable creatures, who had to be carried to the apparatus, and others, who, exhausted by their sufferings, dragged themselves to it with difficulty, return to their affairs cured and contented. These cures have been effected, at an unfavourable season, in ten, eight, six, and sometimes even by a smaller number of sittings. Two cases only, excessively obstinate, required twenty-four."

When we announced, on the 17th of September, our intention of establishing a fumigatory, we could recommend it only by the experience of Dr. Galés. A

<sup>\* &</sup>quot;Lettre de M. le docteur Stiller, medecin de l'Hôpital des Fréres de la Miséricorde."

<sup>† &</sup>quot;Extrait (traduction) de la Gazette de Vienne, du 4 Avril, 1818."

prectice of nine months, without authorising us, as yet, to form a definitive judgment upon this method, permits us now to know the truth of this physician's assertions:

"As well as at Vienna, we have ascertained the efficacy of sulphurous vapour in gouty affections. in lumbago, sciatica, and in other chronic diseases of this kind, in scorbutic diseases, and in scabies; and we can say, with Dr. de Carro, "That in diseases to which this mode of treatment is applicable, the proportion of cases wherein we fail, is very small in comparison to those wherein we succeed. Although the fumigations are not infallable, we also say, "That the art of healing never possessed a remedy more active or more efficacious; and that this mode of treatment, which requires sometimes much perseverance, often astonishes by the promptitude of its effect. Obstinate scorbutic eruptions that resisted the most efficacious remedies, have been singularly ameliorated, or have been cured, by combining fumigations with the same remedies that were employed before without success. Some old, obstinate, venerial diseases have yielded, in a surprising manner, to sulphurous fumigations; but we still require a greater number of facts to enable us to form, on this subject, a definitive judgment. In fifteen cases of inveterate scabies, the fumigations have produced a complete cure in from five to ten sittings.\*

"I shall shortly have the honour of sending you a circumstantial report of my practice; the date of which, it is true, does not exceed two months, but the

results of which are as fortunate as astonishing."+

\* " Notice des Médecines de Presbourg, Mai, 1818." † " Extrait d'une Lettre de M. le Docteur Grantzow, de Scarnaar en Hongrie."

The preceding official and authentic documents being quite sufficient to demonstrate the great efficacy of the practice of sulphurous fumigation in all inveterate, cutaneous, rheumatic, gouty, and venerial diseases, and consequently the utility of the arrangements which have been made at the Dublin Skin Infirmary, which it is the object of this publication to make known, it is unnecessary for me to enter into further details at present. Those who are more particularly interested in the subject, I refer to my publications, noticed on the following page.—In these publications, numerous cases will be found confirmatory of the practice, directions for its regulation, with a detailed account of the apparatus and of the mode of using it.

For the information of Surgeons of county infirmaries, of governors of hospitals and other charitable institutions, of inspectors of prisons, and of all medical men residing in the country, I take this opportunity of mentioning, that, fumigating apparatuses of the most improved construction, are sold by the Register of the Skin Infirmary, for the benefit of the charity. All communications on this subject are to be directed, post paid, to the Register of the Skin

Infirmary, 20, Moore-st. Dublin.

### IN THE PRESS,

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